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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,126	03/27/2001	James H. Errico	KLR 7146.107	3921

55648 7590 07/11/2006

KEVIN L. RUSSELL  
CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP  
1600 Odstower  
601 SW Second Avenue  
Portland, OR 97204

EXAMINER

SHEPARD, JUSTIN E

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/819,126	<b>Applicant(s)</b> ERRICO, JAMES H.	
	<b>Examiner</b> Justin E. Shepard	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11,13-15,17-53,57 and 59-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11,13-15,17-53,57 and 59-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/06 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

Applicant is advised that should claims **33-38** be found allowable, claims **19-24** will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant is advised that should claims **40-44** be found allowable, claims **45-49** will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When

two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claim **45** simply repeats the limitations found in claim **40**.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims **1-11, 13-15, 25-28, 50-53, 57, and 59-64** are rejected under 35 U.S.C. 103 as being anticipated by Graves (US 5,410,344) in view of Herz (US 6,020,883) in further view of Finseth.

Regarding claim **1, 4, 5**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences wherein said user attribute information includes preferences (See Fig. 4 Step 36 Col. 4 lines 41-51 Col. 6 lines 17-52); (b) receiving program attribute information corresponding to said at least one of said audio and video, where said program attribute information corresponds with said user preferences; and (c) determining the desirability of said at least one of said audio and video based upon said preferences (See Fig. 4 Step 40 Col. 6 lines 17-52), wherein said preferences selectively include data indicative of at least a first, a second, and a third option; (i) said first option including a positive preference indicative of the desirability of said at least one of audio and video; (ii) said second option including a preference indicative of non-

desirability of said at least one of audio and video; (iii) said third option including a preference indicative of indifference desirability of said at least one of audio and video (From the specification Page 122 lines 5-23, Page 123 lines 1-5 Data indicative of options is a value and the option is determined simply by a numeric range the value falls within. Preferences in Graves' system receive are weighted (See Col. 7 lines 45-66 Col. 8 lines 5-46). Various weights would inherently fall within various numeric ranges (options). Thus, Graves meets the limitations of the claim).

Graves fails to disclose where program attribute weights can take on negative or a neutral (0) value (See Figs. 5 and 6 Col. 8 Eqn. 1). However, using negative or neutral program attribute weights in television program ranking systems is well known in that art as taught by Herz (See Col. 10 lines 31-63 cv is equivalent to Graves' w). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that user could assign negative values to attribute weights as taught by Herz to allow the user to express a level of aversion to a program attribute (See Herz Col. 10 lines 60-63).

Graves also fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second

level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim 2, Graves teaches wherein said first option is a non-binary preference value (See Fig. 5 Col. 7 Lines 49-54 Weights are based on numbers with values 1-10).

Regarding claim 3, Graves teaches wherein said second option is a non-binary preference value (See Fig. 5 Col. 7 Lines 49-54 Weights are based on numbers with values 1-10).

Regarding claim 6, Graves teaches wherein said preferences are adjustable by a user (See Fig. 5, Fig. 6 and Col. 6 lines 60-68, Col. 7 lines 1-36).

Regarding claim 7, Graves teaches wherein said preferences include at least one default value (See Col. 5 lines 44-50 Default values are inherent to initial loading of personal preference value).

Regarding claim 8, Graves teaches wherein said preferences are adjustable by a user (See Fig. 5, Fig. 6 and Col. 6 lines 60-68, Col. 7 lines 1-36).

Regarding claim 9, Graves teaches wherein said determining results in a value (See Col. 7 lines 45-66 Col. 8 lines 5-46 Programs evaluated by Graves' system receive a grade (value) based on an equation).

Regarding claim 10, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences wherein said user attribute information includes a plurality of preferences (See Fig. 4 Step 36 Col. 4 lines 41-51 Col. 6 lines 17-52); (b) receiving a first plurality of program attribute information corresponding to said at least one of said audio and video, (c) receiving a second program plurality of attribute information corresponding to said at least one of said audio and video (figure 4, step 34); and (d) determining the desirability of said at least one of said audio and video based upon a relative ranking between said first program attribute information and said second program attribute information (See Col. 6 lines 17-52).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second



level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim 11, Graves teaches wherein said determining the desirability includes: (a) calculating a first ranking value for said first program attribute information (See Col. 6 lines 17-52, Col. 8 Eqn. 1); (b) calculating a second ranking value for said second program attribute information (See Col. 6 lines 17-52, Col. 8 Eqn. 1); and (c) determining said relative ranking based upon said first ranking value and said second ranking value (See Col. 6 lines 17-52).

Regarding claim 13, Graves teaches wherein said determining the desirability includes and operation where, (a) said first program attribute information includes a first attribute and free from a second attribute (See Fig. 3, Fig. 5, Col. 4 lines 52-67, Col. 5 lines 1-62 Attributes are independent of one another. For example, Story Appeal is rated separately from Actor #1); (b) said second program attribute information includes said first attribute and said second attribute (See Fig. 3, Fig. 5 A second program could contain both attributes i.e. Story appeal and Actor #1); and (c) said determining said relative ranking indicates said second program as more desirable than said first program (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **14**, Graves teaches wherein said determining the desirability includes and operation where, (a) said first program attribute information includes a first attribute and free from a second attribute (See Fig. 3, Fig. 5, Col. 4 lines 52-67, Col. 5 lines 1-62 Attributes are independent of one another. For example, Story Appeal is rated separately from Actor #1); (b) said second program attribute information includes said first attribute and a relatively smaller presence of said second attribute in comparison to said first attribute (See Fig. 3, Fig. 5 A second program could have a smaller value for one attribute versus another i.e. Actor #1 has a smaller value than Story appeal); and (c) said determining said relative ranking indicates said second program as more desirable than said first program (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **15**, Graves teaches wherein said determining the desirability includes and operation where, (a) said first program attribute information includes a first attribute and a second attribute, where said second attribute has a first relatively smaller presence than said first attribute in said first program (See Fig. 3, Fig. 5 A program could have a smaller value for one attribute versus another i.e. Actor #1 has a smaller value (weight) than Story appeal); (b) said second program attribute information includes said first attribute and said second attribute, where said second attribute has a second relatively smaller presence than said first attribute in said second program,

where said first relatively smaller presence is smaller than said second relatively smaller presence (See Fig. 3, Fig. 5 A program could have a smaller value for one attribute versus another i.e. Actor #1 has a smaller value(weight) than Story appeal and a program could have a smaller value for an attribute when compared to that value for that attribute of another program); and (c) said determining said relative ranking indicates said second program as more desirable than said first program (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **25**, Graves teaches a method for selecting at least one of audio and video comprising: (a) receiving user attribute information corresponding to user preferences, wherein said user attribute information includes a plurality of preference values (See Abstract Col. 5 lines 44-67, Col. 6 lines 1-16); (b) receiving program attribute information corresponding to said at least one of an audio and a video; and (c) evaluating said user attribute information and said program attribute information by determining: (i) a first score when a portion of said user attribute information matches a portion of said program attribute information and said first score is based at least in part upon one of said preference values (See Col. 8 Eqn 1 A first score is calculated,  $i = 1$ ); (ii) a second score when another portion of said user attribute information matches another portion of said program attribute information and said second score is based at least in part upon one of said preference values (See Col. 8 Eqn 1 A second score is

Art Unit: 2623

calculated,  $i = 2$ ); (iii) a composite score based, at least in part, upon said sorts score and said second score (See Col. 8 Eqn 1 Scores are added).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute

information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim **26**, Graves teaches wherein said evaluating is free from combining multiple preference values into a single composite preference value (See Col. 8 Eqn 1. Preference values are combined to make a composite score not a single composite preference value).

Regarding claim **27**, Graves teaches wherein a said composite score is determined for a plurality of said videos, and said video are ranked based, at least in part, upon said composite scores. (See Col. 6 lines 17-52).

Regarding claim **28**, Graves teaches wherein said composite score is determined free from comparing said first score and said second score (See Col. 8 Eqn 1 The composite score is the sum of the first score and the second score. Summing is free from comparison).

Regarding claim **50**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences (See Col. 5 lines 44-68, Col. 6 lines 1-16); (b) receiving program attribute information corresponding to said at least one of a first audio and first video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) receiving program attribute information corresponding to said at least one of a second audio and second video (See Fig. 4 Step 34 Col. 6 lines 17-52 This step is done for a plurality of programs); and (d) ranking said at least one of said first audio and first video, and, said at least one of said second audio and second video, in response to receiving said user attribute information and said program attribute information for said at least one of said first audio and first video, and, said at least one of said second audio and second video (See Col. 6 lines 17-52).

Graves fails to disclose where program attribute weights can take on negative values wherein said negative preference results in decreasing said rankings to a lower level than would have resulted had said negative preference not been included. However, using negative program attribute weights in television program ranking systems is well known in that art as taught by Herz (See Col. 10 lines 31-63 cv is

equivalent to Graves' w). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that user could assign negative values to attribute weights as taught by Herz to allow the user to express a level of aversion to a program attribute (See Herz Col. 10 lines 60-63).

Graves also fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.



Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim **51**, Graves modified with Herz teaches wherein said ranking determines said first video as more desirable for said user than said second video (See Graves Fig. 4 Step 42d Col. 6 lines 17-52).

Regarding claim **52**, Graves modified with Herz teaches wherein said ranking determines said second video as more desirable for another user than said first video (See Graves Fig. 4 Step 42c Col. 6 lines 17-52).

Regarding claim **53**, Graves modified with Herz teaches wherein said ranking is in a relativistic manner (See Col. 6 lines 17-52).

Regarding claim **57**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences; (b) receiving program attribute information corresponding to said at least one of an audio and video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) evaluating said user attribute information and said program attribute information by: (i) determining a first value based upon, at least in part, a first a portion of said user attribute information matches a portion of said program attribute information (See Col. 6 lines 17-52 Col. 8 Eqn. 1 programs are evaluated for attributes  $i=1$  to  $n$ . The value for  $i=1$  is the first value), and (ii) determining a second value based upon, at least in part, a second portion of said user attribute information matches a portion of said program attribute information (See Col. 6 lines 17-52 Col. 8 Eqn. 1 programs are evaluated for attributes  $i=1$  to  $n$  The value for  $i=2$  is the second value); (d) discarding said at least one of said audio and video, in response to receiving said user attribute information and said program attribute information for said at least one of said audio and video, as a desirable said at least one of audio and video for said user based upon if at least one of said first value or said second value indicates non-desirability of said at least one of audio and video (See Col. 6 lines 17-52 The program with the lowest grade is discarded); (e) if said at least one of audio and video is not discarded as a result of

step (d) then determining a third value based upon, at least in part, said first value and said second value (See Col. 6 lines 46-49 If two programs share a common grade one program the time the two programs have been stored is compared. The length of time a program is stored is based on the programs grade compared to other programs. The grade is based on the first value and the second value. Thus, the time a program is stored is based upon the first value and second value).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter

the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim **59**, Graves teaches wherein said evaluating is based upon a summation operation (See Col. 8 Eqn. 1). From the specification the AND function is an averaging function (Page 131 lines 13-14), the result of Graves summation divided by the number of elements summed ( $n$ ). The examiner takes Official Notice that averaging to normalize a set of numbers is well known in the art. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that the result of his summation equation was divided by the number of elements added together to create normalized grades.

Regarding claim **60**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences; (b) receiving program attribute information corresponding to said at least one of an audio and a video (See Fig. 4 Step 34 Col. 6 lines 17-52); and (c) evaluating said at least one of said audio and video, in response to receiving said user attribute information and said program attribute information based upon, (i) a first set of a plurality of preferences wherein said first set is evaluated based upon a first operator (See Col. 8 lines 5-68, Col. 9 lines 1-3); (ii) a second set of a plurality of preferences wherein said second set is evaluated based upon a second operator (See Col. 8 lines 5-68, Col. 9 lines 1-3); (iii) wherein said first set and said second set are evaluated independent of the number of preferences of said first set and said second set (See Col. 8 lines 5-68, Col. 9 lines 1-3 First set and second set are simply partitions of Graves elements 1 to n such partitioning does not effect outcome of Graves' equation. Thus, the limitations of this claim are anticipated by Graves).

Graves fails to disclose a method where said user attribute information and said program attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute

information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Graves and Herz fail to disclose a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Finseth discloses a method where said program attribute information includes hierarchical levels, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level

dependent upon said at least one of said program attribute information at said first level (column 12, lines 47-48 and 53-57; figure 4, parts 98A).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical program attribute information taught by Finseth in the method disclosed by Graves and Herz. The motivation would have been to provide a more intuitive method of filtering the display of programs when provided in the EPG.

Regarding claim **61**, Graves teaches wherein at least one of said first operator and said second operator is an "OR" function. (See Col. 8 Eqn. 1). From the specification the "OR" function is a summation (Page 135 line 1).

Regarding claim **62**, Graves teaches wherein said first operator and said second operator are "OR" functions (See Col. 8 Eqn. 1).

Regarding claim **63**, Graves teaches wherein said first set and said second set depend from the same preference within said hierarchy (See Col. 8 Eqn. 1). The first set and second set are on the same level of the hierarchy and depend from the overall preference).

Regarding claim **64**, Graves teaches wherein said first set and said second set have a different number of preferences (See Col. 8 Eqn. 1).  $i$  values 1 to  $n$  could be an odd number divided into two sets).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **17-24, 29-49, and 65-69** are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of Herz.

Regarding claim **17**, Graves teaches a method for selecting at least one of audio and video comprising (a) receiving user attribute information corresponding to user preferences, wherein at least a portion of said user attribute information include preference elements characterized by a set selected from at least the following (See Col. 7 lines 37-64 and Col. 8 lines 1-51) Preference elements are weights in Graves system): (i) a neutral preference indicating indifference to said preference element (See Fig. 5 Not Appropriate); (ii) a nominal preference indicating at least one of desire for and disdain of said preference element (See Fig. 5 Preferences can be ranked 1-10); (iii) a maximally preference indicating said preference element is to be selected (See Fig. 5 Preferences can receive a maximal ranking); (iv) a minimal preference (See Fig. 5 Preferences be given a minimal ranking); (b) receiving program attribute information corresponding to said at least one of audio and video (See Fig. 4 Step 34 Col. 6 lines 17-52 ); and (c) selecting, in response to receiving said user attribute information and



said program attribute information, at least one of said audio and video based upon said preference elements (See Col. 6 lines 17-52).

Graves fails to disclose where the minimal preference indicates said preference element is not to be selected. However, having a user reject certain preferences that contribute the to the ranking of a program is well known in the art as taught by Herz (See Col. 10 lines 51-60). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that weights could take on the value of zero thereby allowing a user to reject certain preferences used to evaluate programs as taught by Herz in order to give the user more control in evaluating programs.

Graves also fails to disclose a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter

the suggested programs by making certain attributes more specific and dependent on others.

Regarding claim **18**, Graves modified with Herz teaches said user attribute information including preference elements characterized by at least one additional preference (See Herz Col. 10 lines 51-60 weights can take on values 0-10 and negative values. This is more than five values).

Regarding claim **19**, Graves teaches a method for selecting at least one of audio and video comprising: (a) receiving user attribute information corresponding to a plurality of user preferences, (b) receiving programs attribute information corresponding to said at least one of a first audio and first video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) receiving program attribute information corresponding to said at least one of a second audio and second video (See Fig. 4 Step 34 Col. 6 lines 17-52); and (d) ranking said at least one of said first audio and first video, and, said at least one of said second audio and second video, in response to receiving said user attribute information in said hierarchical levels and said program attribute information for said at least one of said first audio and first video, and, said at least one of said second audio and second video, based upon less than all of said first, second and third hierarchical levels (See Col. 4 lines 64-68, Col. 5 lines 1-5, Col. 6 lines 17-52, Col. 8 Eqn. 1).

Graves fails to disclose a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first

level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level, and at least one of said user attribute information is at a third level depending upon at least one of said user attribute information at said second level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, and at least one of said user attribute information is at a third level depending upon at least one of said user attribute information at said second level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Regarding claim **20**, Graves teaches wherein said ranking determines said first video as more desirable for said user than said second video (See Col. 6 lines 17-52

Col. 8 Eqn. 1 Based on the weighting and values of each attribute a first program could receive a higher ranking than a second program).

Regarding claim **21**, Graves teaches wherein said raking determines said second video is more desirable for another user than said first video (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **22**, Graves teaches wherein said less than all of said hierarchical levels includes a single branch (See Col. 8 Eqn. 1, If  $n = 1$  Top level (x) would only have one branch).

Regarding claim **23**, Graves teaches wherein said less than all of said hierarchical levels includes a plurality of branches (See Col. 8 Eqn. 1, If  $n > 1$  Top level (x) would have a plurality of branches).

Regarding claim **24**, Graves teaches wherein said less than all of said hierarchical levels are ranked based upon a relativistic manner (See Col. 6 lines 17-52).

Regarding claim **29**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences, wherein said user attribute information includes a

plurality of preferences that are arranged to form a preference template where a plurality of said preferences includes a preference test and a preference value; (b) receiving program attribute information corresponding to said at least one of an audio and a video (See Fig. 4 Step 34 Col. 6 lines 17-52); and (c) evaluating said user attribute information and said program attribute information by determining: (i) a first score when a portion of said user attribute information matches a portion of said program attribute information and said first score is weighted based upon the respective said preference values (See Col. 7 lines 37-68, Col. 8 lines 1-51 First score is determined when  $i = 1$  in Equation 1); (ii) a second score when another portion of said user attribute information matches another portion of said program attribute information and said second score is weighed based upon the respective said preference values (See Col. 7 lines 37-68, Col. 8 lines 1-51 Second score is determined when  $i = 2$  in Equation 1); (iii) a composite score based, at least in part, upon said first score and said second score (See Col. 7 lines 37-68, Col. 8 lines 1-51 Eqn. 1. Composite score is the sum); (iv) repeating steps (i)-(iii) for a plurality of said program attribute information (See Col. 8 Eqn. 1  $i$  can equal any multiple of two); (v) sorting at least one of said audio and video associated with said programs attribute recommendations (See Col. 6 lines 17-52).

Graves fails to disclose a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at

Art Unit: 2623

least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Regarding claim **30**, Graves teaches wherein said evaluating is free from combining multiple preference values into a single composite preference value (See Col. 8 Eqn 1. Preference values are combined to make a composite score not a single composite preference value).

Regarding claim **31**, Graves teaches wherein a said composite score is determined for a plurality of said videos, and said video are ranked based, at least in part, upon said composite scores (See Col. 6 lines 17-52).

Regarding claim **32**, Graves teaches wherein said composite score is determined free from comparing said first score and said second score (See Col. 8 Eqn 1 The composite score is the sum of the first score and the second score. Summing is free from comparison).

Regarding claim **33**, Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to a plurality of user preferences; (b) receiving program attribute information corresponding to said at least one of a first audio and first video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) receiving program attribute information corresponding to said at least one of a second audio and second video (See Fig. 4 Step 34 Col. 6 lines 17-52); and (d) comparing in a relativistic manner said at least one of said first audio and first video, and, said at least one of said second audio and second video, in response to receiving said user attribute information in said hierarchical levels and said program attribute information for said at least one of said first audio and first video, and, said at least one of said second audio and second video, based upon less than all of said first, second, and third hierarchical levels (See Col. 4 lines 64-68, Col. 5 lines 1-5, Col. 6 lines 17-52, Col. 8 Eqn. 1 Programs are ranked based on grade,  $x$ . This is only one level in the hierarchy. Ranking based on one level out of two is ranking based on less than all levels. Also, if programs receive the same grade the one that has been stored longer receives a lower rank).

Graves fails to disclose a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level, and at least one of said user attribute information is at a third level depending upon at least one of said user attribute information at said second level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, and at least one of said user attribute information is at a third level depending upon at least one of said user attribute information at said second level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.



Regarding claim **34** Graves teaches wherein said comparing determines said first video as more desirable for said user than said second video (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a first program could receive a higher ranking than a second program).

Regarding claim **35**, Graves teaches wherein said comparing determines said second video as more desirable for another user than said first video (See Col. 6 lines 17-52 Col. 8 Eqn. 1 Based on the weighting and values of each attribute a second program could receive a higher ranking than a first program).

Regarding claim **36**, Graves teaches wherein said less than all of said hierarchical levels includes a single branch (See Col. 8 Eqn. 1, If  $n = 1$  Top level (x) would only have one branch).

Regarding claim **37**, Graves teaches wherein said less than all of said hierarchical levels includes a plurality of branches (See Col. 8 Eqn. 1, If  $n > 1$  Top level (x) would have a plurality of branches).

Regarding claim **38**, Graves teaches wherein said less than all of said hierarchical levels are ranked based upon a relativistic manner (See Col. 6 lines 17-52).

Regarding claim 39, the USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements. Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences; (b) receiving program attribute information corresponding to said at least one of an audio and video (See Fig. 4 Step 34 Col. 6 lines 17-52); (c) ranking said at least one of said audio and video, in response to receiving said user attribute information and said program attribute information for said at least one of said audio and video, based upon at least one of the following characteristics: (i) the number of times that one of said preferences corresponds with said program attribute information, wherein said at least one of said audio and video receives a higher ranking with an increasing said number (See Col. 5 lines 6-9 See Col. 8 Eqn. 1 The amount of time an actor is on screen determines the A value. The higher the A value, the higher the x value (ranking)); (ii) the number of times that a preselected set of preferences, less than all of said preferences, corresponds with said program attribute information, wherein said at least one of said audio and video receives a higher ranking with an increasing said number; (iii) the number of times that one of said preferences corresponds with said program attribute information, wherein said at least one of said audio and video receives a higher ranking with a decreasing said number; (iv) the number of times that a preselected set of preferences, less than all of said preferences, corresponds with said program attribute information, wherein said at least one of said audio and video receives a higher ranking with a decreasing said number.

Graves also fails to disclose a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter the suggested programs by making certain attributes more specific and dependent on others.

Regarding claim **40**, Graves teaches wherein said characteristic includes said the number of times that a preselected set of preferences, corresponds with said program attribute information, wherein said at least one of said audio and video receives a higher ranking with an increasing said number (See Col. 5 lines 6-9 See Col. 8 Eqn. 1 The

amount of time an actor is on screen determines the A value. The higher the A value, the higher the x value (ranking)), further characterized by: (a) said preselected set of preferences includes a first preference and a second preference, wherein said ranking is based upon an or functionality between said first preference and said second preference (See Fig. 5 Col. 8 lines 5-68, Col. 9 lines 3, See Col. 8 37-43). Graves differs from the claimed invention in that Graves system typically weights and adds up all of said preferences  $i = (1 \text{ to } n)$ . However, having a user reject certain preferences that contribute the to the ranking of a program is well known in the art see Herz (See Col. 10 lines 51-60). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Graves so that weights could take on the value of zero thereby allowing a user to select a set of preference categories to be used to evaluate programs as taught by Herz to give the user more control evaluating programs.

Regarding claim **41**, Graves modified with Herz teaches wherein said program attribute information includes preference values indicating the amount of said preferences (See Graves Col. 4 lines 64-68, Col. 5 lines 1-5).

Regarding claim **42**, Graves modified with Herz teaches wherein said preference values are used as the basis of said ranking said at least one of audio and video (See Graves Col. 8 lines 5-65).

Regarding claim **43**, Graves modified with Herz teaches wherein said ranking includes just slightly more is better combination (See Graves Col. 6 lines 17-52 Choosing programs with a larger grade is the same as a just slightly more is better combination).

Regarding claim **44**, Graves modified with Herz teaches wherein said ranking includes a strong preference is better combination (See Graves Col. 8 Eqn. 1 A strong preference would make a weight higher which in turn would give a higher ranking to a program).

Regarding claim **45-49**, claims **45-49** are analyzed and rejected in discussion with claims **40-44**, respectively.

Regarding claim **65** Graves teaches a method for selecting at least one of audio and video comprising (See Abstract): (a) receiving user attribute information corresponding to user preferences; (b) receiving program attribute information corresponding to said at least one of an audio and a video (See Fig. 4 Step 34 Col. 6 lines 17-52); and (c) evaluating said at least one of said audio and video, in response to receiving said user attribute information and said program attribute information based upon, (i) a first set of a plurality of preferences wherein said first set is evaluated based upon a first operator (See Col. 8 lines 5-68, Col. 9 lines 1-3); (ii) a second set of a plurality of preferences wherein said second set is evaluated based upon a second

operator (See Col. 8 lines 5-68, Col. 9 lines 1-3); (iii) wherein said first set and said second set are evaluated based on a ratio functionality (See Col. 8 lines 5-68, Col. 9 lines 1-3 First set and second set are simply partitions of Graves elements 1 to n such partitioning does not effect outcome of Graves' equation. Each set is evaluated by weighing and adding individual elements of the set. This is ratio functionality. Thus, the limitations of this claim are anticipated by Graves).

Graves also fails to disclose a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level, wherein at least one of said program attribute information is at a first level and as least two of said program attribute information is at a second level dependent upon said at least one of said program attribute information at said first level.

Herz discloses a method where said user attribute information includes hierarchical levels, wherein at least one of said user attribute information is at a first level and as least two of said user attribute information is at a second level dependent upon said at least one of said user attribute information at said first level (column 17, lines 52-61).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the hierarchical user attribute information taught by Herz in the method disclosed by Graves. The motivation would have been to provide a simple way to filter

the suggested programs by making certain attributes more specific and dependent on others.

Regarding claim **66**, Graves teaches wherein at least one of said first operator and said second operator is an "OR" function (See Col. 8 Eqn. 1). From the specification the "OR" function is a summation (Page 135 line 1).

Regarding claim **67**, Graves teaches wherein said first operator and said second operator are "OR" functions (See Col. 8 Eqn. 1).

Regarding claim **68**, Graves teaches wherein said first set and said second set depend from the same preference within said hierarchy (See Col. 8 Eqn. 1 See Col. 8 Eqn. 1 The first set and second set are on the same level of the hierarchy and depend from the overall preference).

Regarding claim **69**, Graves teaches wherein said first set and said second set have a different number of preferences (See Col. 8 Eqn. 1  $i$  values 1 to  $n$  could be an odd number divided into two sets).


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

  
**CHRISTOPHER GRANT  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800**